Anna-Maria Rivas McGowan
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Dr. Anna-Maria McGowan is NASA's Senior Engineer for Complex Systems Design, leading the Agency's initiatives to develop methodologies for engineering complex systems. In this role, she serves as a technical advisor to the Agency and the principal strategist for collaborating with external leaders to advance interdisciplinary research, design, and development of aerospace and non-aerospace methodologies that address increasing complexities in aerospace systems. Dr. McGowan has over 23 years experience in aerospace research and leadership, conducting research in diverse areas including aeroelasticity, adaptive structures and materials, design science, and complex systems. She has also led several multidisciplinary aeronautics research projects that include military and commercial aerospace vehicles. Dr. McGowan is based at the NASA Langley Research Center and has served as a project manager, NSF visiting scientist, DARPA Agent, NATO consultant, short course instructor, flight test leader, wind-tunnel test engineer, senior researcher, and NASA spokesperson.

Recently Dr. McGowan served as the Project Manager of NASA's Convergent Aeronautics Solutions (CAS) Project. CAS is a central part of NASA's strategic vision for transformation in global air mobility, seeking to cultivate multi-disciplinary, revolutionary concepts and harness convergence in aeronautics and non-aeronautics technologies. Dr. McGowan's prior positions include: 1) serving as the Technology Integration Manager for NASA's Subsonic Fixed Wing Project in the Fundamental Aeronautics Program; 2) leading a successful RPV flight test program, serving as the DARPA Agent and NASA Principal Investigator for DARPA's Morphing Aircraft Structures Phase III program (concept to flight in 2 years); 3) serving as the Acting Deputy Director for Aerospace Vehicle Systems Program Office, assuming responsibility for the $650M program budget; and 4) conceiving and managing NASA's Morphing Project of the 21st Century for over 4 years. She has developed and led other significant projects in aeronautics that include technologies such as: innovative high-lift; micro flow control; tailored, lightweight wing concepts; adaptive materials and structures; biologically-inspired flight; aeroservoelastic concepts; and extreme short take-off and landing.

Dr. McGowan has a B.S. in Aeronautical and Astronautical Engineering from Purdue University, an M.S. in Aerospace Engineering from Old Dominion University, and a Ph.D. in Design Science in Engineering from the University of Michigan. Dr. McGowan has taught short courses and presented guest lectures in several countries, primarily in Europe and Asia, and served as a consultant to national laboratories, major industries, and government agencies across the US. Dr. McGowan is an AIAA Associate Fellow and received the AIAA Sperry Award, Purdue University Outstanding Aerospace Engineering Alumnus Award, and National Women of Color Technical Innovation in Government Award. She has also earned numerous NASA individual and group achievement awards, including the NASA Exceptional Achievement Medal. In her spare time, Dr. McGowan is an outdoor enthusiast who enjoys wilderness camping and sea kayaking with her son. Her travels often take her to Trinidad in the Caribbean where her family and culture originate.